
ARDISIA LUNDELLIANA,
A NEW SPECIES OF
MYRSINACEAE FROM
PANAMA

The efforts of the Missouri Botanical Garden's plant exploration program in Panama continue to yield new and phytogeographically interesting taxa, even in areas as well known as western Panama. During routine identification of plants collected by Gordon McPherson, I discovered a hitherto undescribed species of *Ardisia*, which is described below:

Ardisia lundelliana Pipoly sp. nov. TYPE: Panama. Chiriquí: vic. Fortuna Dam, forested slopes along ridge at S boundary of watershed, 8°45'N, 8°15'W, 1,250 m. Tree 4 m; calyx brown; corolla pale pink; fr. green, 28 Apr. 1986, *G. McPherson 9107* (holotype, MO; photocopy, US). Figure 1.

Ob ramulos foliorum costas abaxiales necnon inflorescentiarum rhachides rufo-stellato-tomentosos et furfuraceo-stipitato-lepidotos, inflorescentias cernuas, flores subcorymbosos, pedicellos recurvatos, antheras lineo-lanceolatas et longitudinaliter dehiscentes *A. brenesii* arcte affinis, sed ab ea foliis praeclare petiolatis (non sessilibus), monomorphis (non dimorphis), ellipticis (non oblanceolatis vel obovatis nec oblanceolatis vel oblongis), basibus cuneatis (non auriculatis) atque apicibus acutis (non acuminatis), sepalis 5.2–6.0 (non 1.4–1.6) mm longis marginalibusque integerrimis (non erosis), petalisque 12.0–13.9 (non 3.9–4.5) mm longis, intus prope basin verrucosis (non laevis) statim cognoscitur.

Tree to 4 m, the branchlets, petioles, abaxial leaf costae, inflorescence rachis, pedicels and calyx rufous-stellate tomentose and furfuraceous stipitate-lepidote. Leaves petiolate, the petioles marginate, (1.1–)1.5–2.0 cm long, the blades coriaceous, elliptic, (7.0–)11.0–16.7(–18.0) cm long, (4.0–)5.2–7.7 cm wide, apically acute, basally cuneate, glabrous above, densely furfuraceous stipitate-lepidote below, the margins entire, revolute. Inflorescence terminal, pendent, paniculate, 8.0–15.0 cm long, the peduncle 2.3–2.7 cm long, the rachis linear in flower, becoming flexuous in fruit. Flowers corymbose; pedicels terete, 0.6–1.4 cm long; sepals erect, coriaceous, dextrorsely contorted, widely ovate, 5.2–6.0 mm long, 3.6–4.0 mm wide, apically acute, asymmetric, basally au-

riculate on one side, the auricle and margin scarious, glandular-ciliate, densely rufous stellate and furfuraceous lepidote without, sparsely stipitate-lepidote basally within, black lineate-punctate; petals reflexed at anthesis, chartaceous, lanceolate, 12.0–13.9 mm long, 3.9–4.5 mm wide, apically attenuate, slightly asymmetric, glabrous, densely black punctate and lineate-punctate, pink, verruculose basally within, the margin white, subentire, irregular; stamens 10–12.5 mm long, the filaments hyaline, 6.0–6.3(–6.9) mm long, glabrous, the anthers linear-lanceolate, concolorous, 4.0–5.9 mm long, apically apiculate, basally sagittate, dorsifixed, the connective inconspicuously black-punctate dorsally, longitudinally dehiscent; ovary globose, 5.3–5.7 mm tall, 3.0–3.1 mm diam., densely orange-punctate; style 9.1–9.4 mm, exerted at anthesis, eccentric or not, densely and prominently orange-punctate; stigma punctiform; placenta globose, obtuse apically, 1.2–1.3 mm long and in diameter, the ovules 19–24, pluriseriate. Fruit globose, 5–7 mm diam. (immature), prominently verrucose, inconspicuously punctate.

Ardisia lundelliana belongs to a group of species often referred to the genus *Auriculardisia* Lundell. Because the salient features defining this group (Lundell, 1981) have been encountered in a number of paleotropical members of the more broadly defined *Ardisia* Swartz, this species is assigned to *Ardisia* until a more thorough, pantropical survey is completed (Pipoly & Stone, in prep.). With rufo stellate-tomentose abaxial leaf midribs, inflorescence rachises and branchlets, pendent, subcorymbose flowers on panicles, and linear-lanceolate and longitudinally dehiscent anthers, *A. lundelliana* is clearly most closely related to *A. brenesii* (including *A. limonensis* Lundell). However, *A. lundelliana* is readily separable by its petiolate (not sessile), monomorphic (not dimorphic), and elliptic (not oblanceolate or obovate) leaves with cuneate (not auriculate) bases and acute (not acuminate) apices. Floral characters allowing easy recognition include the longer, entire sepals

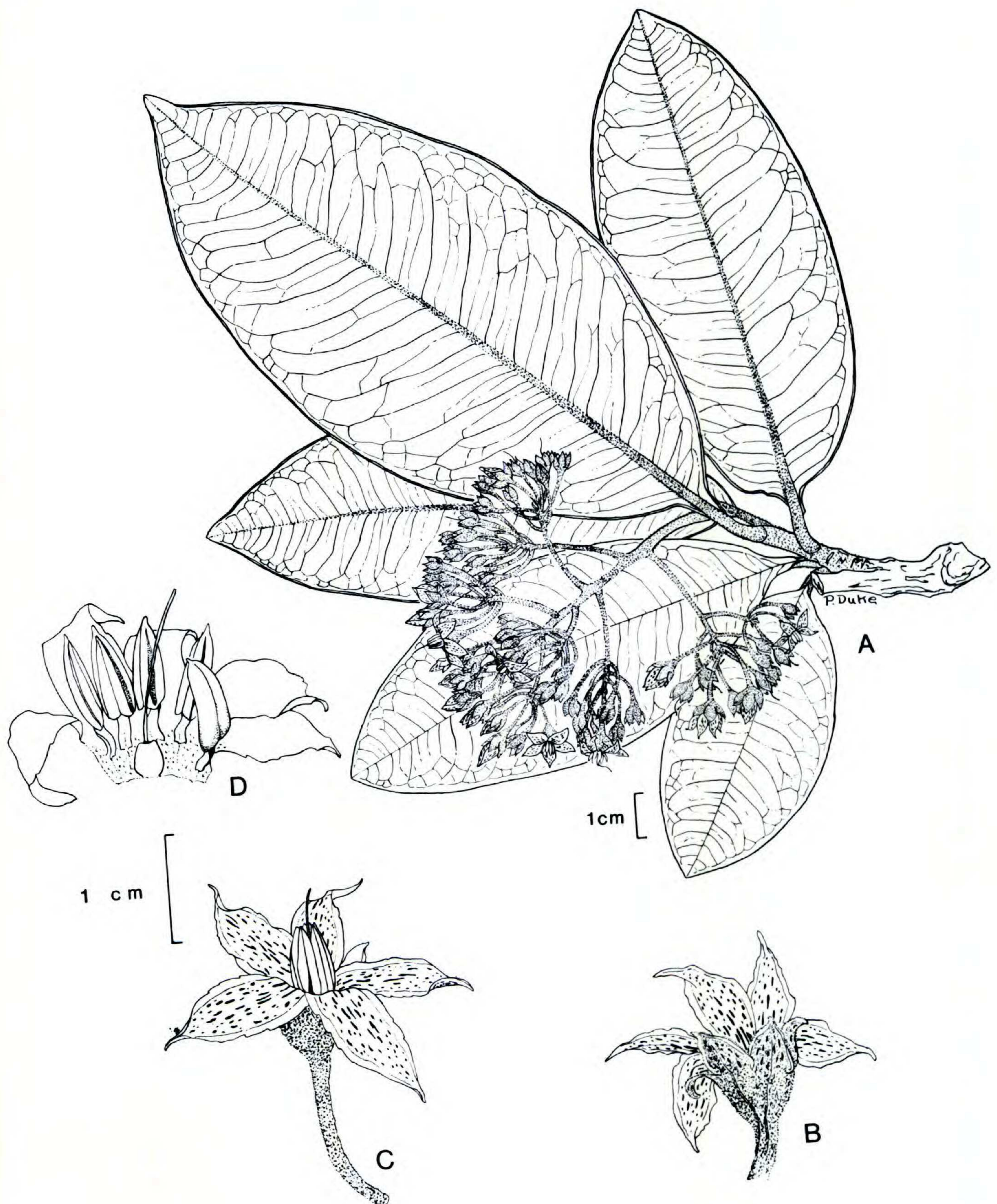


FIGURE 1. *Ardisia lundelliana* Pipoly.—A. Branchlet, showing pendent inflorescence, tomentose costae.—B. Calyx, showing hyaline, entire margin.—C. Flower, at anthesis.—D. Dissected flower, showing another dehiscence and adaxial corolla surface basally verrucose. (A–D drawn from holotype, *McPherson 9107*, MO.)

and longer, verrucose petals. Among these characters, a preliminary survey revealed that the verrucose petals represent an autapomorphic character state.

The dimorphic leaf character present in *A. brenesii* refers to the production of modified leaves

axilliant to the inflorescence of that species, a feature thought to autapomorphic to it (Pipoly, submitted). Ecologically, *A. brenesii* is restricted to riparian areas in tall wet forest or moist premontane forest, whereas *A. lundelliana* is a montane forest, ridge-top species. Clearly, much more exploration

of western Panama (especially the Atlantic slope) is needed, because this and some 50 other species of *Ardisia* collected from there are known only from their type specimens.

It is with great pleasure that I dedicate this species to Cyrus Longworth Lundell, who has just completed his sixtieth year of research in Mesoamerican Myrsinaceae.

My studies in Myrsinaceae were supported by a Smithsonian Postdoctoral Fellowship. Support for illustration is provided by a Smithsonian Research Opportunity Fund Grant, no. 1233F809. I thank Peggy-Ann Duke for her skillful illustration.

LITERATURE CITED

LUNDELL, C. L. 1981. Neotropical Myrsinaceae—VI. *Phytologia* 49: 341–354.

PIPOLY, J. (submitted). Myrsinaceae. In: W. D. Stevens, editor, *Flora de Nicaragua*. Missouri Botanical Garden, St. Louis.

—John J. Pipoly III, *Department of Botany NHB 166, National Museum of Natural History, Smithsonian Institution, Washington, D.C. 20560, U.S.A. Present address: Missouri Botanical Garden, P.O. Box 299, St. Louis, Missouri 63166-0299, U.S.A.*